

Amendments to the Specification:

In the "Brief description of the drawing", please replace the descriptions of Figs. 1-4 with the following amended descriptions:

FIG 1 is a block diagram showing a prior art standalone machine vision system in which both the vision processor and the user interface are realized in a single computer.

FIG 2 is a block diagram showing a prior art machine vision system comprised of a user interface computer connected with a vision processor computer via a general-purpose communications link.

FIG 3 is a block diagram showing a prior art networked machine vision system comprised of a plurality of vision processor computers connected via a network to a user interface computer.

FIG 4 shows the a prior art sequence of operations performed by a developer setting up a two-VP vision system.

On page 8, please replace the first paragraph of the "Detailed description of the invention" with the following amended paragraph:

How to accomplish the extension of an existing application layer protocol for communications between a UI and a VP will now be explained. Typical client/server protocols are command based, which means that the client (the UI) issues commands to the server (the VP), and the server issues responses to the client. Therefore, all that must be added to an existing protocol is a single command that the UI issues upon connecting to the VP. When the VP receives

this command it responds by sending data corresponding to its capabilities to the UI. The exact nature of this data depends upon the particular VP.

On page 11, please replace the last paragraph with the following amended paragraph:

There are at least three methods that may be used to allow a single UI to configure a heterogeneous set of VPs. In all three methods, with reference to Fig. 7, the VP 71 transfers across a communications channel 72 a block of data comprising a description of the VP's capability 73 to the UI 74. In the first method, the description is comprised of a numeric or text identification code which is sent from the VP to the UI

On page 16, please replace the following two paragraphs with the following amended paragraphs:

The UI uses this information to more appropriately guide the user in system configuration. As shown in FIG 7 6, the function name 61, is prominently displayed when configuring an instance of a particular VP function. Also shown are parameter names 62 63, and currently selected values 64 65 for each parameter. The displayed format of each current value depends on the parameter type. For example parameters of numeric type are shown as floating point numbers 64, and parameters of enumerated type are shown as one of a list of enumerated strings 65.

FIG 8 shows how the UI enables selection from a list 81 of string ID for parameters of enumerated type. The use user may select one of the members of the list by moving the cursor 82 on top of the desired element and clicking a mouse button or pressing a specific keyboard key. The use of string IDs reduces the

One page 17, please replace the second paragraph with the following amended paragraph:

The organization of VP functions into categories 51 and subcategories 52 (shown in FIG 6 5) is very important to aid the user in selecting from the potentially large number of available functions. Two levels of grouping have proved sufficient in our systems, but VPs with fewer functions may benefit from fewer levels of grouping and VPs with more functions may benefit from more levels.

Please cancel the new matter introduced by the amendment filed 10/05/2001. Instead, please enter the formal drawings provided in the Appendix, provided herewith.